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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,437	07/18/2003	David W. Townsend	2003P88029 US	4359

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SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

SMITH, RUTH S

ART UNIT	PAPER NUMBER
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3737

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/623,437

Applicant(s)

TOWNSEND ET AL.

Examiner

Ruth S. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,10,16,43,44,49-54,56-75,91,99 and 145 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,10,16,43,44,49-54,56-75,91,99,145 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7-18-03; 2/10/05; 2/23/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Double Patenting

Claim 62 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 52. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,2,4,10,16,43,44,49-54,56-75,91,99,145 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,631,284. Although the conflicting claims are not identical, they are not patentably distinct from each other because they involve an obvious broadening of the claimed invention.

Claims 1,2,4,10,16,43,44,49-54,56-75,91,99,145 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,490,476. Although the conflicting claims are not identical, they are

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not patentably distinct from each other because they involve an obvious broadening of the claimed invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1,2,4,10,43,44,49,51-52,58-59,61-62,65,69-70,72-73,99 are rejected under 35 U.S.C. 102(e) as being anticipated by Morgan et al. The claims are readable on Morgan et al which discloses a combined CT and PET scanning system. The system includes a CT scanner A having a gantry, a PET scanner B, a patient support 28 and a display device E,F,G which can display a CT image, a PET image or a fused PET/CT image. The CT scanner is separate from and fixed relative to the PET scanner, the support is moveable between the scanners. The PET scanner is movable via rails 36 with respect to the CT scanner. Morgan et al disclose in column 8, the correction of the PET image for scatter. Morgan et al further discloses applying correction factors obtained from the CT image to the scatter corrected PET image (see columns 8-10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 53,54,63,64,68,74,75,91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al. Morgan et al disclose a combined CT and PET scanning system. The system includes a CT scanner A having a gantry, a PET scanner B, a patient support 28 and a display device E,F,G which can display a CT image, a PET image or a fused PET/CT image. In the absence of any showing of criticality, whether the PET scanner and CT scanner are moved while the patient support stays fixed or whether the scanners are fixed while the support is moved would have been an obvious matter of design choice of known equivalents in the art. The end result is the same, that being relative movement between the support and the scanners. Furthermore, in the absence of any showing of criticality, the specific manner in which the attenuation correction factors are determined and how the reconstruction of the attenuation-corrected image is accomplished would have been an obvious matter of design choice of known equivalents in the art.

Claims 16,56,66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al in view of Motomura et al. Morgan et al disclose a combined CT and PET scanning system. The system includes a CT scanner A having a gantry, a PET scanner B, a patient support 28 and a display device E,F,G which can display a CT image, a PET image or a fused PET/CT image. It is well known in the art to provide for truncation errors in fan beam based CT images due to a reduction in the effective field of view. An example of such is seen in Motomura et al. It would have been obvious to one skilled in the art to have modified Morgan et al such that the CT image is corrected for field of view truncation in that such is a well known expedient in the art for eliminating image artifacts.

Claims 50,60,71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al in view of DiFilippo et al. Morgan et al disclose a combined CT and PET scanning system. The system includes a CT scanner A having a gantry, a PET scanner B, a patient support 28 and a display device E,F,G which can display a CT image, a PET image or a fused PET/CT image. Morgan et al fails to specifically disclose how the patient is moved through the PET scanner. DiFilippo et al disclose a PET scanner where a patient is moved in an axial direction during scanning in order to acquire PET scan data. It would have been obvious to one skilled in the art to have modified Morgan et al such that the patient is moved axially through the PET scanner in order to acquire data from desired regions of the patient.

Claim 145 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al in view of Motomura et al and DiFilippo et al. Morgan et al disclose a combined CT and PET scanning system. The system includes a CT scanner A having a gantry, a PET scanner B, a patient support 28 and a display device E,F,G which can display a CT image, a PET image or a fused PET/CT image. It is well known in the art to provide for truncation errors in fan beam based CT images due to a reduction in the effective field of view. An example of such is seen in Motomura et al. It would have been obvious to one skilled in the art to have modified Morgan et al such that the CT image is corrected for field of view truncation in that such is a well known expedient in the art for eliminating image artifacts. Morgan et al fails to specifically disclose how the patient is moved through the PET scanner. DiFilippo et al disclose a PET scanner where a patient is moved in an axial direction during scanning in order to acquire PET scan data. It would have been obvious to one skilled in the art to have modified Morgan et al such that the patient is moved axially through the PET scanner in order to acquire data from desired regions of the patient.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-4745.

A handwritten signature in black ink, appearing to read 'Ruth S. Smith', with a stylized, cursive script.

Ruth S. Smith
Primary Examiner
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RSS